WHAT IS CLAIMED IS:

1. A multi-zonal monofocal opthalmic lens comprising:

a inner zone having a first optical power;

a intermediate zone surrounding the inner zone and having a second optical power that is different from the first power by a magnitude that is less than at least about 0.75 Diopter; and

a outer zone surrounding the intermediate zone having a third optical power different from the second optical power.

2. The multi-zonal monofocal opthalmic lens of claim 1, wherein, the third optical power is equal to the first optical power.

3. The multi-zonal monofocal opthalmic lens of claim 1, wherein the second power differs from the first power by a magnitude that is less than or equal to about 0.65 Diopter.

4. The multi-zonal monofocal opthalmic lens of claim 1, wherein the inner zone comprises a spherical surface and the intermediate zone comprises an aspherical surface.

5. The multi-zonal monofocal opthalmic lens of claim 1, further comprising:

an outer zone surrounding the intermediate zone and having a third power wherein the second power differs from both the first and third powers by a magnitude that is less than or equal to at least about 0.75 Diopter.

6. The multi-zonal monofocal opthalmic lens of claim 5, wherein the second power differs from both the first and third powers by a magnitude that is less than or equal to about 0.65 Diopter.

7. The multi-zonal monofocal opthalmic lens of claim 5, wherein the inner zone comprises a spherical surface and the intermediate zone comprises an aspherical surface.

8. The multi-zonal monofocal opthalmic lens of claim 7, wherein the outer zone comprises an aspherical surface.

9. The multi-zonal monofocal opthalmic lens of claim 1, further comprising:

multiple outer zones surrounding the intermediate zone, wherein each zone in the lens has a power that differs from the power of the adjacent zone(s) by a magnitude that is less than or equal to at least about 0.75 Diopter.

10. The multi-zonal monofocal opthalmic lens of claim 9, wherein there are between 3 and 7 total zones.

11. The multi-zonal monofocal opthalmic lens of claim 1, wherein the opthalmic lens is an intraocular lens and includes haptics.

12. A multi-zonal monofocal intraocular lens having an optic with a plurality of discrete concentric optical zones centered on the optical axis, the zones adapted to focus incoming light rays to form an image from an object, comprising:

an inner zone overlapping the optical axis of the lens for producing an image when the intraocular lens is centered on the optical axis of the human eye; and

a first surrounding zone concentric about the inner zone and adapted to compensate for optical aberrations in the image resulting from implanted intraocular lens decentration of greater than at least about 0.1 mm.

13. The multi-zonal monofocal intraocular lens of claim 12, wherein the first surrounding zone compensates for optical aberrations in the image resulting from implanted intraocular lens decentration of greater than about 0.4 mm.

14. The multi-zonal monofocal intraocular lens of claim 12, wherein the first surrounding zone compensates for optical aberrations in the image resulting from implanted intraocular lens decentration of greater than about 0.5 mm.

15. The multi-zonal monofocal intraocular lens of claim 12, wherein the first surrounding zone also compensates for optical aberrations in the image resulting from implanted intraocular lens tilt of greater than at least about 1 degree.

16. The multi-zonal monofocal intraocular lens of claim 12, wherein the first surrounding zone also compensates for optical aberrations in the image resulting from implanted intraocular lens tilt of greater than at least about 5 degrees.

17. The multi-zonal monofocal intraocular lens of claim 12, wherein the first surrounding zone also compensates for optical aberrations in the image resulting from implanted intraocular lens tilt of greater than at least about 10 degrees.

18. The multi-zonal monofocal intraocular lens of claim 12, wherein the power of the first surrounding zone differs from the power of the inner zone by a magnitude that is less than or equal to at least about 0.75 Diopter.

19. The multi-zonal monofocal intraocular lens of claim 12, wherein the inner zone comprises a spherical surface and the first surrounding zone comprises an aspherical surface.

20. The multi-zonal monofocal intraocular lens of claim 12, further comprising:

at least one other zone outside of the first surrounding zone, wherein each zone in the lens has a power that differs from the power of any other zone by a magnitude that is less than or equal to at least about 0.75 Diopter.

21. The multi-zonal monofocal intraocular lens of claim 20, wherein there are between 3 and 7 total zones.

22. A method of designing a multi-zonal monofocal opthalmic lens, comprising:

providing an optical model of the human eye;

providing an optical model of a lens comprising an inner zone, an intermediate zone, an outer zone, and zonal design parameters; and

adjusting the zonal design parameters based on an image output parameter for one or more non-optimal states of the lens.

23. A method as in claim 22, further including testing the intraocular lens over a plurality of corneal surface variations and dispositions of optical elements in the eye's optical system using tolerance analyzing techniques.

24. A method as in claim 22, further comprising repeating at least a portion of the method to modify zonal parameters and achieve a better average optical performance.